

## **REMARKS**

Claims 1-26 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 102**

Claims 1-3, 5-15, 22-23, and 25-26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Capuani U.S. Pat. No. 4,478,378. This rejection is respectfully traversed.

The present invention relates to mobile platforms (e.g., aircraft) having thrust vectoring capabilities (e.g., thrust vectoring nozzle, engine rotation, etc.) for switchably providing upper surface blowing that can be switched on or off. To this end, independent claims 1, 10, 16, and 22 each require an exhaust flow that can be directed to provide upper surface blowing, but that can also be discharged in a manner so that the exhaust flow does not provide upper surface blowing.

Capuani, however, does not disclose, teach or suggest upper surface blowing that can be switched off. Indeed, Capuani does not describe any mode of operation or embodiment in which the jet exhaust is not flowing over a wing and providing upper surface blowing.

The office action states that the nozzle and wing arrangement shown in Figure 6 and discussed in column 4 of Capuani anticipates claims 1-3, 5-15, 22-23, and 25-26. While Figure 6 appears to show a jet engine's exhaust flowing across the top surface of a wing, the upper surface blowing is never switched off in Capuani. Further, Capuani Figures 13 and 14 illustrate the lift resulting from the jet exhaust emerging from the

nozzle over the wing surfaces. Although Capuani states the lift is increased when the aircraft is in a condition in which it is necessary to have high lift, such as takeoff and landing, Figure 13 shows the jet exhaust flowing across the upper wing surface even when the wing is in a nil inclination position suitable for cruise.

Because Capuani does not disclose jet exhaust flow being discharged in a direction that is not across the lift producing surface and providing upper surface blowing, Applicants respectfully submit that claims 1-3, 5-15, 22-23, and 25-26 are not anticipated by Capuani. For at least these reasons, the Patent Office is respectfully requested to reconsider and withdraw the section 102 rejections of the claims 1-3, 5-15, 22-23, and 25-26.

With regard to dependent claims 2-3, 5-9, 11-15, 23, and 25-26, these claims depend from the above independent claims, which Applicants believe to be allowable in view of the above remarks. Thus, Applicants believe these dependent claims are also in a condition for allowance for at least those reasons given above in connection with the independent claims 1, 10, 16, 22 from which they respectfully depend.

#### **REJECTION UNDER 35 U.S.C. § 103**

Claims 4, 16-21, and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Capuani U.S. Pat. No. 4,478,378 in view of Pellissier U.S. Pat. No. 1,795,035. This rejection is respectfully traversed.

Claims 4, 16-21, and 24 each depend from a claim shown above to be allowable. Accordingly, Applicants respectfully submit that claims 4, 16-21, and 24 are each in

condition for allowance for at least the reasons given above in connection with the independent claims 1, 16, and 22 from which they respectfully depend.

In addition, the office action states that Pellissier discloses a means for pivoting an engine that would be an obvious substitute for the nozzle of Capuani. But Pellissier teaches pivoting the engines for the express purpose of permitting the machine to rise quickly or to assume substantially a hovering position in the air. Nowhere does Pellissier (or Capuani for that matter) disclose, teach or even remotely suggest pivoting an engine for switching on and off upper surface blowing. Thus, Applicants submit that it would not have been obvious to one having ordinary skill in the art to merely pivot the engine as taught by Pellissier to obtain an exhaust flow configuration that enables upper surface blowing to be switched on and off.

Furthermore, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *MPEP 2143.01* Pellissier teaches pivoting the engines for the purpose of permitting the machine to rise quickly or to assume substantially a hovering position in the air. Pellissier neither teaches nor suggests pivoting an engine for the purpose of directing engine discharge flow in manner so as to switchably provide upper surface blowing. Obviousness cannot be established by combining references without also providing evidence of the motivating force which would impel one skilled in the art to do what the Applicants have done. *MPEP 2144*.

For these additional reasons, Applicants respectfully submit that claims 4, 16-21 and 24 are not rendered obvious by Capuani in view of Pellissier. Accordingly, the

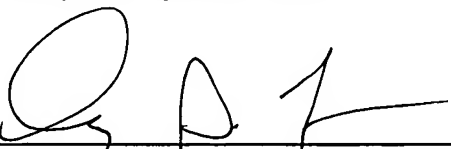
Patent Office is respectfully requested to reconsider and withdraw the section 103 rejections of claims 4, 16-21, and 24.

**CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Therefore, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned directly at (314) 726-7502.

Respectfully submitted,

Dated: August 10, 2004

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